

REMARKS

Claims 4-8 remain pending.

Claim Amendments

By this amendment, claims 4 and 5 are amended to more specifically define the polymer, support for which resides at page 15, lines 6-23 of the specification. No new matter is added by this amendment.

Rejection under 35 USC 102(b) over Tanaka et al

Claims 4-8 and 12-16 stand rejected under 35 USC 102(b) as being anticipated by Tanaka et al '500 (which corresponds to U.S. Patent 5,910,567). This rejection respectfully is traversed.

The disclosed method comprises adding protease, a surfactant, and water to natural rubber latex to deproteinize the latex.

Tanaka et al teaches the use of a surfactant selected from the group consisting of (a) an anionic surfactant, (b) a non-ionic surfactant, (c) an amphoteric surfactant, and (d) any combination thereof. See column 4, lines 9-12 of the '567 patent.

Applicants do not intend that the water-soluble polymer also function as a surfactant. The Examiner's attention is directed to the specification at page 14, lines 8-9 wherein the *additional*

presence of a surfactant is provided for *apart from* the water-soluble polymer.

The Examiner takes the position that the features upon which applicants rely are not stated in the claims. The Examiner further states that the surfactant recited in the reference contains polyalkylene chains with 2 to 4 carbons per group and 1 to 50 groups per chain (amounting to 2 to 200 carbons per chain). The Examiner further concludes that this is consistent with applicants' claims, such that the surfactant, in effect, meets the water-soluble limitation of the claims.

In response, and in an attempt to more clearly define the claimed invention, claims 4 and 5 are amended to recite that the water soluble polymer has a principal chain of **(meth)acrylate polymer, alginate polymer, vinyl polymer, or cellulose polymer** comprised of 100 to 5,000,000 carbon atoms.

The water soluble polymers of claims 4 and 5 accordingly clearly distinguish over the polymers of the reference which have previously been asserted by the Examiner to meet applicants' "water soluble polymer" limitation.

The rejection is accordingly without basis and should be withdrawn.

Rejection under 35 USC 103(a)

Claims 4-8 stand rejected under 35 USC 103(a) as being unpatentable over Tanaka et al '459 in view of and Tanaka et al '500. This rejection respectfully is traversed to the extent deemed to apply to the claims as amended.

The Tanaka et al '459 reference is directed to a process for producing raw rubber from deproteinized natural rubber. The process comprises coagulating rubber particles in a deproteinized natural rubber latex by (1) adding a specific nonionic surfactant to the deproteinized natural rubber latex, and heating the latex to a temperature not lower than the cloud point of the nonionic surfactant; or alternatively, (2) adding a coagulation assistant selected from the group consisting of (a) an ionic surfacant, (b) an amphoteric surfactant, (c) a nonionic surfactant, (d) a nonionic or amphoteric oligomer or polymer, and (e) an anionic oligomer or polymer, to the deproteinized natural rubber latex, and then recovering the coagulated rubber particles.

However, as previously argued, the reference is silent with respect to the addition of a water-soluble polymer as specified by applicants' claims.

Also, it is noted that the nonionic surfactant or the coagulating assistant disclosed by the reference is added to the deproteinized natural rubber latex. This step is in contrast to

applicants' method of adding the water-soluble polymer of the claimed invention to the natural rubber latex together with a protease in order to deproteinize the rubber latex. As a result, Tanaka fails to disclose or suggest the claimed invention.

The cited secondary references fail to overcome the deficiencies of the Tanaka reference. More specifically, the secondary Tanaka reference fails to suggest the addition of the water-soluble polymer recited in now-amended claims 4 and 5 as discussed above.

It is also illogical to combine the teachings of the secondary references with those of Tanaka '459 given the fact that Tanaka '459 treats a deproteinized rubber.

In the Advisory Action, the Examiner states that "applicant has failed to distinguish between the (at least partially) water-soluble polymers of the prior art and the presently claimed water-soluble polymers".

In response, applicants have above distinguished the "polymeric surfactant" from the water-soluble polymer recited in the claims by more clearly defining the identity of the water-soluble polymer.

Also, the use of the surfactant has been shown to be unsuccessful in providing heat sensitizing properties and film-

forming properties to natural rubber latex as provided in applicants' invention.

In view of the above, the claimed invention is neither disclosed nor suggested by the cited references, taken either singly or in combination. The rejection is thus without basis and should be withdrawn.

The application is accordingly believed to be in condition for allowance, and an early indication of same is requested.

A check in the amount of \$450.00 is attached as payment for the requested two-month extension of time.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By

Andrew D. Meikle
Registration No. 32,868

P.O. Box 747
Falls Church, VA 22040-0747

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